

Zimbabwe Infrastructure Sector Overview

1.1 Economic Opportunity and infrastructure

Zimbabwe's biggest economic challenge is reducing the size of the state. Conservatively, 50% of Zimbabwe's GDP is public spending. Zimbabwe has potential given its natural resources, existing stock of public infrastructure and comparatively well skilled human resources. Realising this will require action to correct fiscal policies, re-stabilise the monetary system and resolve arrears to international lenders that would allow for a resumption of development financing. Political economy/ governance issues need to be given priority to attract the necessary investment in infrastructure. Five years ago infrastructure experts were stating Zimbabwe had a very good stock of public infrastructure that made the ongoing crisis less of an issue for transport and power. Now however, that stock of infrastructure needs investment to upgrade and repair. Few countries are able to invest unless the government addresses its public finance, debt and governance issues. Zimbabwe has agreed to repay arrears by the end of 2018. Repayment would unlock more cash from the ADB and is necessary to access other sources of development financing. Once arrears are addressed and paid, reforms could start and get infrastructure investment back on track.

The following opportunities are key to promoting inclusive growth:

- **Growth and job creation:** Mining (13% of GDP) accounted for more than 70% of the country's foreign currency earnings in 2018. Government intends to make amendments to the Mines and Minerals Act to make it more investor friendly to attract more investment. Sector requires reform to improve governance. For travel and tourism (7.1% of GDP), Zimbabwe seeks a seven-fold growth in tourism export earnings, as much as \$7bn by 2030. Gov providing tax incentives and import duty free exemption on certain categories of capital goods for hotels, restaurants and safari operators however airport density is low and the related infrastructure dilapidated.
- **Inclusion and poverty reduction:** Access to improved water is highly inequitable, with poorest not connected to piped water. The main driver of inequity is that piped-water is more affordable in densely populated urban areas than in rural areas. The limited reach of piped water into rural areas makes the population largely reliant on springs and wells. During the Mugabe era, very few would benefit from any growth the economy experienced. This was because of the politics of patronage, political and economic isolation that pushed the people in power to engage with practices that would limit redistribution of growth. Once the reforms needed after the debt payment are resolved, Zimbabwe needs to address the issue of equity and inclusivity across all sectors.
- **Investment in infrastructure:** Zimbabwe spent \$2bn on critical infrastructure between 2009-16 when it should have invested this on an annual basis. The AfDB puts the cumulative deficit at \$15bn over 5yrs. This lack of investment created a deterioration of the stock of infrastructure, especially transport. NRZ (the railway operator) has been bankrupt for years. Recapitalisation of the parastatal requires prioritisation.
- **Climate and environmental resilience:** Climate change is projected to have profound impacts on Zimbabwe, including heightened water stress, increased incidence of drought, declines in crop and livestock productivity, change in wildlife ranges, an increase in wildfire incidents and the possible expansion of malaria zones. Most Zimbabweans rely on rain-fed agriculture and livestock for a living.

1.2 Stakeholder Analysis

This section sets out in short bullet points the relative engagement of key players in infrastructure.

Public sector	<ul style="list-style-type: none"> • Experiencing a liquidity crisis, a manifestation of structural deficiencies and distortions in the economy. Progress was made in improving the business climate, but governance and accountability remain problematic. • With limited access to foreign inflows, the budget deficit reached 8.7% of GDP in 2016, up from 2.4% in 2015. The 2018 elections are likely to put further pressures on the budget, and the government is resorting to domestic borrowing to cover the budget deficit. • Encouraging developments in 2018: Zimbabwe has become the nineteenth member state of the Africa Finance Corporation, a leading infrastructure development finance institution • Important to monitor the outcome of any talks between WB/AfDB and Zimbabwe Government at the WB annual meeting in October 2018.
Private sector	<ul style="list-style-type: none"> • Agricultural output growth will be supported by scaled up coordination and funding from the government and private-sector and greater investment in irrigation development. • Total investment committed to PPPs since 1990 in Zimbabwe is \$200m, from which the most projects were related to the Infrastructure.
Donors	<ul style="list-style-type: none"> • The World Bank approved the Zimbabwe Reconstruction Fund (ZIMREF), a country-specific umbrella-type multi-donor trust fund that contributes to strengthening Zimbabwe's systems for reconstruction and development. The EU, which froze EU aid to Zimbabwe, may lift the ban from 1st November 2018. If lifted, KfW, AFD and EIB will be keen to

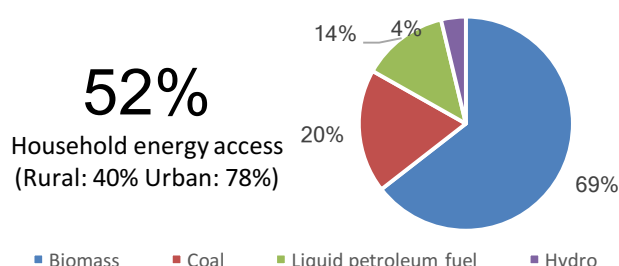
1. Sectoral analysis

2.1 Energy

Overview

Zimbabwe faces consistent power shortages as indicated by an estimated deficit of approx. 60%. The Zimbabwe Electricity Supply Authority's (ZESA) generation capacity was measured in February 2016 as producing at only 845 MW, against a projected national demand of 2,200 MW and an installed capacity of approximately 1,940 MW. The country is importing power from South Africa, Mozambique, and the DRC, however recent announcements indicate substantial potential changes meant to strengthen the national energy mix through new hydro-, solar- and coal-based generation. The South African Power Pool (SAPP) HQs are in Harare. Zimbabwe enjoys a unique location, a very central location in southern Africa and thus both power and transport go through Zimbabwe.

Energy Access for households and business



Approximately 200,000 urban households and 1.2 million rural households do not have access to electricity.

Energy Planning

- The Government of Zimbabwe maintains a target of achieving 85% electricity access by 2020.
- A 2016 application by ZETDC to ZERA for a proposed tariff increase, from an average of USD 0.0986/kWh to USD 0.146/kWh was rejected, however is currently under review by the Ministry of Energy and Power Development.
- Zimbabwe is heavily reliant on its coal and water resources to produce electricity. The bulk supply is produced at the Kariba Dam Hydroelectric Power Station (750 MW), at the Hwange Thermal Power Station (920 MW) and at three smaller coal-fired power stations, all of which are managed by the ZESA subsidiary, the Zimbabwe Power Company (ZPC).
- Zimbabwe imports 41% of its power.

Opportunities:

- 2,400MW Batoka Gorge Hydroelectric Power Project
- MoZiSa (Mozambique, Zimbabwe, and South Africa) Regional Interconnector Project. Has capacity to improve access to power through the regional grid, allowing smooth transfer of electricity between and among SADC member states. Comprises development, construction and operation of a 400-500kV high-voltage transmission over 935km.

2.2 Transport

Overview

- The government is in the process of reconstructing the road network. While the government has rehabilitated the main east-west highway with funding from the Development Bank of Southern Africa, there is an urgent need to rehabilitate the busy Beitbridge to Chirundu highway as it is the main trade route linking Zimbabwe to the South African sea ports. Existing capacity constraints at ports
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- Share of 90,000km road network of almost 90,000km in fair to good condition is 60%.
- An additional 12,800km of road network that was reclassified to poor condition requires complete rehabilitation, costing \$1.1bn.
- The transport sub-sectors of road and rail continue to be constrained by capitalisation challenges. Prospects exist in upgrading the roads and rail networks in order to improve the movement of goods to the markets.
- Focused on developing its road network without taking a broader multi-modal view of surface transport
- The government of Zimbabwe is the main provider of air, rail and road services; historically, there has been little participation of private investors in transport infrastructure.
- Goods transported via rail have declined, from 18 million tonnes in 1998 to 4 million tonnes in 2015.
- The National Railways of Zimbabwe (NRZ) employed 17,000 staff in the late 1980's, but today only 4-6000 employees are on hand. The rail system was built in the early 1900's and is suffering from a lack of maintenance.
- NRZ operates about 3,000 km of rail at the 1.067 m gauge providing passenger and freight services. NRZ has an important transit function in the southern part of Africa and is well linked with neighbouring countries.

Import / Export of goods

Top 5 Exports	% GDP	Top Destination
Gold	5.5	South Africa - 90%
Raw Tobacco	2.36	Russia - 15%
Diamonds	1.27	UAE - 37%
Ferroalloys	1.0	Mozambique - 40%
Nickel Mattes	0.91	South Africa- 100%

Trade corridors

- The North-South Corridor Road/Rail Project is a mul modal trans-continental interconnector which pass through Zimbabwe. The project is defined as a mul modal (road, rail and ports) trans-continent interconnector, ultimately connecting Cape Town in the

south and Cairo in the north. The project entails several components, all of which are in various stages of the easy border crossing for both people and goods and will increase the efficiency and capacity of the transport sector. This, in turn, will speed up regional integration and will increase regional trade, while leading to cost savings.

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Ports / Cross border trade

- Doing business rating: 159/190
- About 0.23 km per square kilometre is the road density in Zimbabwe. This is high compared with many developing countries. Only OECD countries have a substantially higher road density than Zimbabwe
- There are 88,100 km of classified roads in Zimbabwe and 17,400 km of them are paved.
- Av time to clear customs: 4.9 days
- Landlocked country

Major investments

With the Port of Beira just 300 km from Forbes border post in Mutare, Zimbabwe is looking to tap into the proximity and opportunity of being a transit hub of the southern region through the Beira corridor using rail and road transport. This will significantly reduce transportation costs of exports and imports.

2.3 Digital Connectivity

Overview

- Introducing various e-Government services. Effort and investment have been made in the fields of ICT backbone infrastructure development, ICTs in education, research and development, the creation of Community Information Centres, ICT governance and the training of legislators and government officials in ICT usage.
- Zimbabwe is now connected to the undersea fibre optic network through SEACOM, WACS and EASSy.
- The uptake and use of ICTs has greatly increased in recent years with the high uptake seeing the “digital divide” between rural and urban areas being reduced dramatically
- Opportunities to invest in ICT along the North South Corridor. Potentially large impact on traffic management and trade facilitation.

Digital access

Network coverage	2G (GPRS) 3G+ 4G	38.33% 40% 30.52%
Access	household internet access Individuals using internet Internet speed Mobile subscription	33.2% 23.12% 36.19 bps 85.25%
Mobile price	Entry level handset Entry data usage	50.02% GDP per capita 149/170
Adult literacy	Male Female	89% 88%

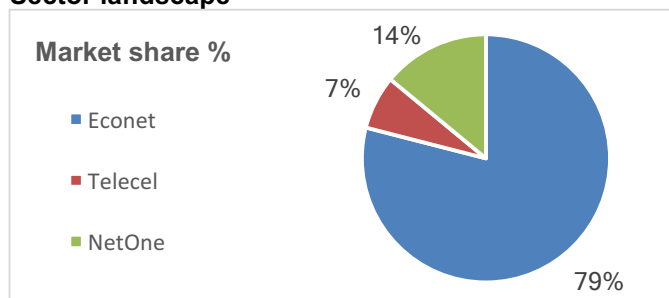
Digital service accessibility

Local content	Apps in local language # apps in local language	127/170 rank 46.95
e-gov services	Digital rank e-gov score	138/170 26.09 GSMA

Planned Investments / Initiatives

Government approved \$250m investment to build 6t mobile towers to serve rural areas

Sector landscape

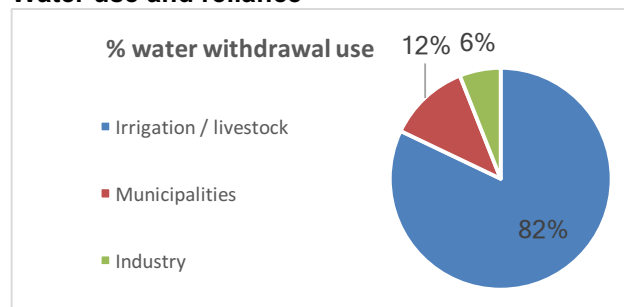


2.4 Water and Sanitation

Overview

- 76% of households have access to improved sources of drinking water. However, this number hides a wide disparity in access to safe drinking water between urban areas (98.4 per cent) and rural areas (67.5 per cent) and also within urban areas. Some parts of Harare, for instance, have not had water supplies for up to five years.
- 25% of households do not have any type of toilet facility. The availability of proper sanitation facilities is much higher in urban than in rural areas. Open defecation is at 31.7%, affecting mostly rural areas.

Water use and reliance



Agricultural water use

- Primary crops; maize, cotton, soybeans, wheat, tobacco and horticultural crops such as roses, cut flowers and vegetables 10.46% of GDP
- 68% pop deriving livelihoods from agriculture
- 68% population rural and 84.3% rural poor
- 10.34% agricultural land / under cultivation
- High dependency on rainfed cropping in rural Zimbabwe

Water resource availability

Improved water resource access	80%
Proportion of total actual renewable freshwater resources withdrawn: MDG Water Indicator (Aquastat)	21%

Infrastructure condition and investment

- The current water and sanitation situation in Zimbabwe is the result of the lack of investment in these sectors during and after the economic crisis of the last decade.
- Legislation and policies on WASH exist but are not fully implemented. There is also a lack of monitoring and evaluation, which has an impact on the overall quality of water and sanitation and on the formulation of adequate strategies and data collection nationwide.
- There is no public awareness of water access issues in rural areas. This is further aggravated by limited stakeholder consultation during preparation of the national development plan, resulting in issues of equity not being given due consideration

Transboundary dependencies

Share 6 major river basins with neighbouring countries: Zambezi, Limpopo, Nata, Save, Shashe and Pungwe. Cooperating with other members of the Southern Africa Development Community (SADC) on the shared management of the regions river systems. The country is a signatory to the SADCs Shared Water Course Systems Protocol, which provides the basis for the management of international rivers in the SADC region, which consists of 14 countries.

Climate-induced vulnerability

- Prone to periodic droughts correlated to El Nino events. Experienced devastating droughts in 2001/02, 2002/03, 2004/05, 2006/07 and 2011/12, directly impacting agriculture. Worst regions: Matabeleland South and Masvingo
- Floodplains: Mid-Zambezi Valley in Mana Pools area, and around the Save-Runde confluence
- Erratic rainfall constrains crop farming across at least 60% of the country

2.5 Urban Infrastructure

Overview

- 83.3% of the employed population is unskilled, 5.4% skilled and 4.9% professionals. Largely due to the absence of a national skills development policy, coupled with an educational curriculum that has not been reviewed for 30+yrs.
- 90% of the collected waste is dumped without separation at the official dumpsite. Some of the waste is illegally dumped and then the authorities move it to the official dumpsite.

Urban Structure

% urbanised	32%
# urban residents	5.17m
% living in informal settlements	25.1% of urban population
Urban poverty (%)	46.5
Urban employment (%) - Total	88.7%

City size	# Cities	% Nat pop.	Tot pop.
Over 1m	1	9.2	1,485,231
500k-1m	1	4.04	653,337
100-500k	5	5.98	966,235
50-100k	8	3.5	572,200
0-50k	27	3.33	538,012

Urban infrastructure overview

Energy	% household access	85.5%
	# power outages (per month)	4.5
Water	% access to improved water	98.4
Solid waste	% households receiving SWM	30%
	% waste recovered	10% (Harare)
Urban transit	Modal split in cities	Foot: 51% Conventional bus: 15%; Commuter Omnibus: 22%
	Air pollution deaths in cities	600

Donor engagement in cities:

World Bank:

- Water Project for Zimbabwe Urban Centres [Zimbabwe Reconstruction Fund - ZIMREF] - \$20m

3.0 Ongoing x-HMG Engagement

Dpt / Org	Initiative	£ value
BEIS	Renewable Energy Performance Platform	48m
DFID	Support to improved water and sanitation in rural areas - Zimbabwe	46m
	Support to the Water and Sanitation Programme (WSP) 2011 - 2015	36m
	Africa Clean Energy Programme (ACE)	28.3m
	Community Led Infrastructure Finance Facility (CLIFF) Phase 2B	25m
	Transboundary Water Management in Southern Africa: Climate Resilient Infrastructure Development Facility	20m
	SHARE - Sanitation and Hygiene Research Programme	16m
	Transboundary Water Management in Southern Africa: Capacity building to better manage shared water resources in the South African Development Community (SADC)	9.4m
	Zimbabwe Reconstruction Fund (ZIMREF)	6m
	Energy and Rural Infrastructure	4.5m